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| 09/991,006 | 11/21/2001 | Richard Gillett | STGN-P01-001 | 3449 |

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| EXAMINER |
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COULTER, KENNETH R

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| ART UNIT | PAPER NUMBER |
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2141

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/991,006

Applicant(s)

GILLETT ET AL.

Examiner

Kenneth R. Coulter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lumelsky et al. (U.S. Pat. No. 6,460,082) (Management of Service-Oriented Resources Across heterogeneous Media Servers Using Homogeneous Service Units and Service Signatures to Configure the Media Servers).

2.1 Regarding claim 1, Lumelsky discloses a system for delivering content over a data network, comprising:

a data storage device for storing content to be delivered over the data network (Figs. 1, 2, 4, 5, 6);

a server process capable of monitoring the data network for responding to a request to serve selected content over the data network (Fig. 5; col. 11, lines 39 – 46);
and

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a file system capable of communicating with the server process and capable of processing the request to identify meta-data associated with the selected content and being representative of a level of service to be provided with the selected content (Fig. 2, item 152; col. 7, lines 28 - 51).

2.2 Per claim 2, Lumelsky teaches a service level manager capable of determining, as a function of the meta-data, whether the selected content may be serviced in compliance with the associated level of service (Abstract; Fig. 2; col. 7, lines 28 - 51).

2.3 Regarding claim 3, Lumelsky discloses that the server process includes a process for directing the request to the service level manager (Fig. 5; col. 11, lines 39 – 46).

2.4 Per claim 4, Lumelsky teaches that the request analyzer process includes a request analyzer process for analyzing the request to identify information associated with a level of service to provide the request (Fig. 2; col. 7, lines 28 - 53).

2.5 Regarding claim 5, Lumelsky discloses that the request analyzer process includes means for identifying information selected from the group consisting of user identification, user ISP identification, transmission throughput, client, and CDN server identification (Fig. 2; col. 7, lines 28 - 40).

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2.6 Per claim 6, Lumelsky does not explicitly teach that the service level manager includes a process for directing the server process to employ a file open process for requesting the file system to access data associated with the selected content. However, a file open process is inherent in Lumelsky in order for databases to be accessed.

2.7 Regarding claim 7, Lumelsky discloses a representation of the level of service to provide the request (Fig. 2; col. 7, lines 28 - 51).

2.8 Per claim 8, the rejection of claims 6 and 7 under 35 USC 102(e) (paragraphs 2.6 and 2.7 above) applies fully.

2.9 Regarding claims 9 – 11, Lumelsky discloses a service level manager that associated with a level of service to provide (Abstract; Figs. 2, 4; col. 7, lines 28 - 51); embeds into a pathname, service level information to be associated with the selected content (Abstract; Figs. 2, 4; col. 7, lines 28 - 51)

2.10 Per claims 12 and 13, Lumelsky teaches that the file system includes parsing a pathname associated with the selected content to identify a level of service to provide to the request content (Abstract; Figs. 2, 4; col. 7, lines 28 - 51); a process for associating the selected content with one of a plurality of different service levels (Abstract; Figs. 2, 4; col. 7, lines 28 - 51).

2.11 Regarding claims 14 – 18, Lumelsky discloses a scheduling process for generating a schedule for servicing the requested content (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 16, lines 10 - 18); an admission process for employing the schedule to determine whether the request for selected content can be accommodated at the level of service associated with the request (col. 7, lines 28 – 67; col. 2, lines 54 - 66); a deadline parameter representative of a time constraint for processing the request (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 16, lines 10 - 37); deadline parameter to generate the schedule for servicing the request (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 16, lines 10 - 37).

2.12 Per claim 19, Lumelsky teaches a slack-time process for arbitrating between scheduling requirements of content having different priorities of service levels (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 14, lines 53 – 57; col. 16, lines 10 - 16).

2.13 Regarding claim 20, Lumelsky discloses a control process for managing a system resource for controlling a rate at which service are provided (Abstract; Figs. 2, 5).

2.14 Per claim 21, Lumelsky teaches that the control process manages a system resource selected from the group of data storage, system memory, processor resources, and network throughput (Fig. 5; col. 7, lines 28 – 32; col. 4, lines 30 - 39).

2.15 Regarding claim 22, the rejection of claim 1 under 35 USC 102(e) (paragraph 2.1 above) applies fully.

2.16 Per claim 23, Lumelsky teaches that controlling access to a system resource includes controlling access to a system resource selected from the group consisting of processor time, system memory, disk access, network bandwidth, and buffer space (Fig. 5; col. 7, lines 28 – 32; col. 4, lines 30 - 39).

2.17 Regarding claim 24, Lumelsky discloses controlling access includes selecting a priority for a thread processing the stream of selected content (col. 16, lines 10 – 21).

Response to Arguments

3. Applicant's arguments filed 11/9/2004 have been fully considered but they are not persuasive.

Applicant argues that "Lumelsky does not teach or suggest levels of service at which requests are handled. As set forth above, Lumelsky uses meta-data to determine whether particular servers are capable of servicing particular requests." (Amendment on 11/9/2004; p. 8, last paragraph)

Examiner disagrees.

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Lumelsky discloses that "each service unit also comprises a **signature representing metadata** used to control access to a service unit by **defining rights, privileges, and characteristics of services** that may use that particular unit." (Abstract).

Also Lumelsky teaches the following:

Particularly, as illustrated in FIG. 2, the **service unit (150)** is represented in terms of an allocation vector (151) whose **members represent resource allocations** for memory (162), disk I/O (163), **network bandwidth B/W (164)**, and CPU resources (161). As will be described in greater detail herein, the service unit allocation vector is referred to herein as a "resource envelope" as needed for provisioning of a media service. The resource envelope represents a bound set according to some criteria over critical-resource requirements associated with the provisioning of a media service. Further, the remote authority maintains a "**service signature**" or **meta-data construct (152)** relating to the **characteristics** of an associated resource envelope. In general, a service signature comprises service management metadata (166) as well as resource management metadata (176). It is an aspect of the present invention that such **service signature be used to customize the integrated service-oriented management approach to resource management**. In particular, a **service signature describes information**, hints, and recommendations about things such as access rights, privileges and characteristics of services that can use that particular service unit. For example, the service signature could be used to define access rights (167) and cost (169) characteristics for any particular service unit. (col. 7, lines 28 – 51).

Clearly Lumelsky discloses levels of service at which requests are handled.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on 5 4 9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharra can be reached on 571 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KENNETH R. COULTER
PRIMARY EXAMINER



krc